10/260,417

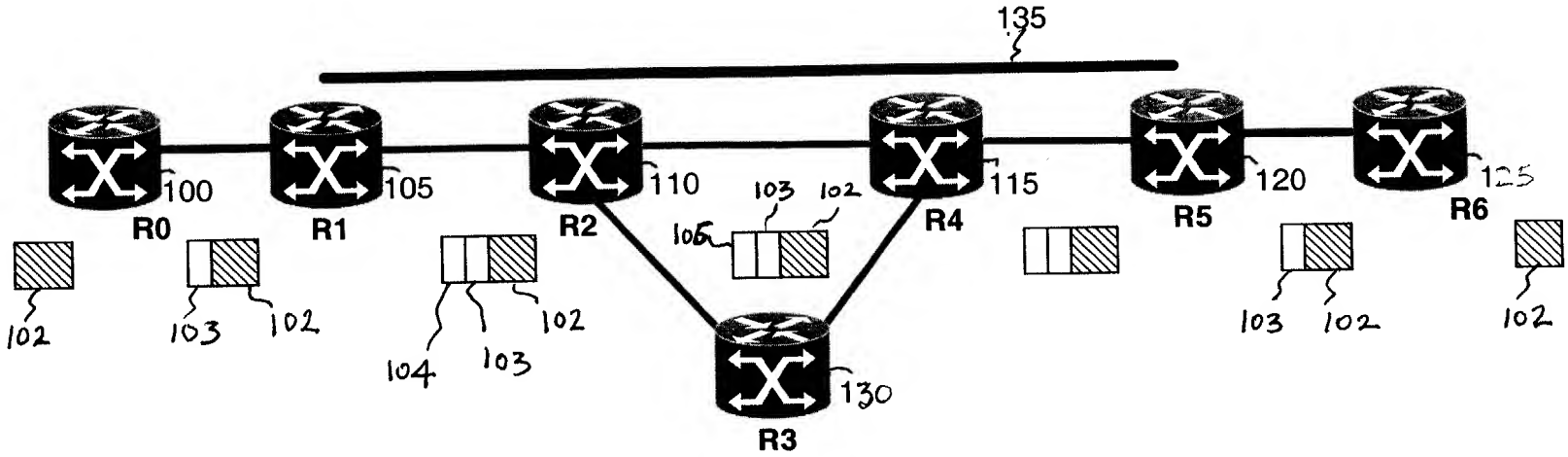

FIG. 1
(PRIOR ART)

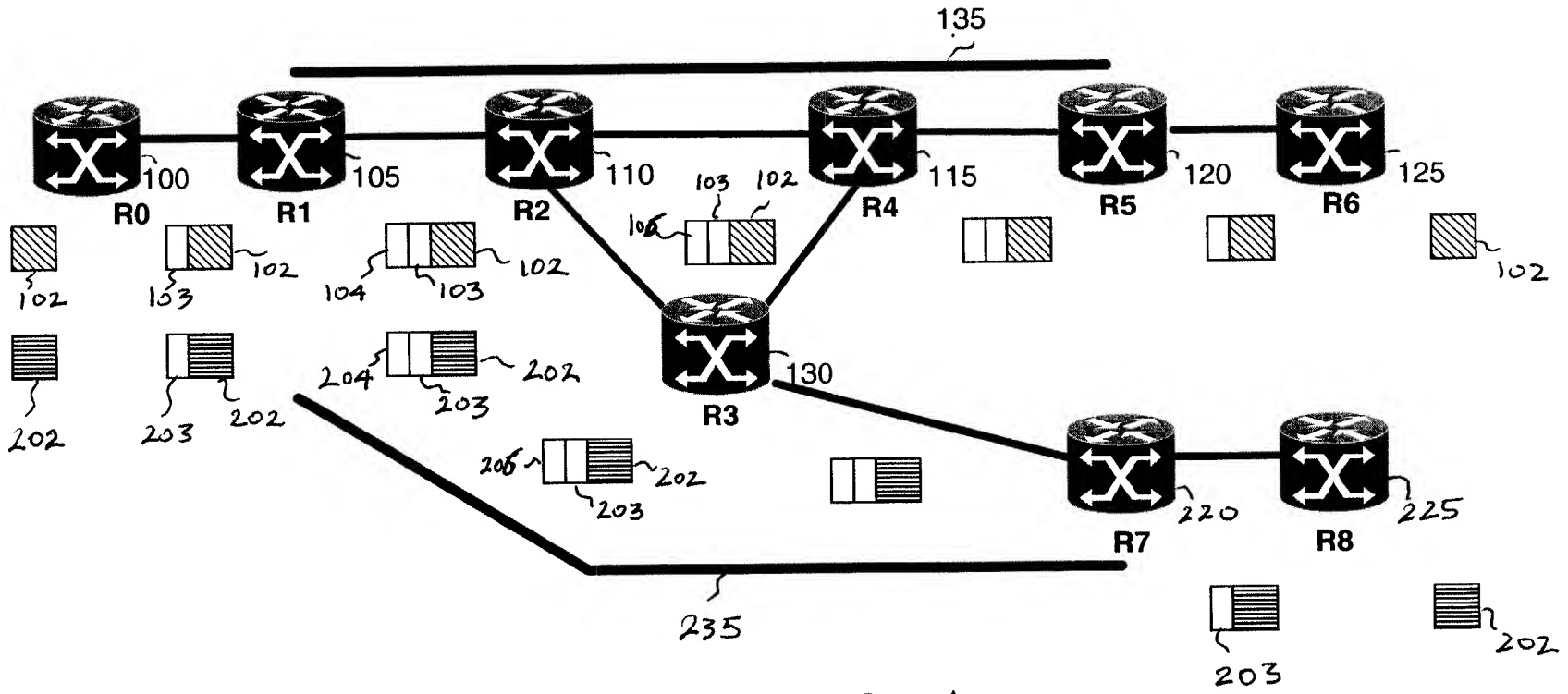

FIG. 2A
(PRIOR ART)

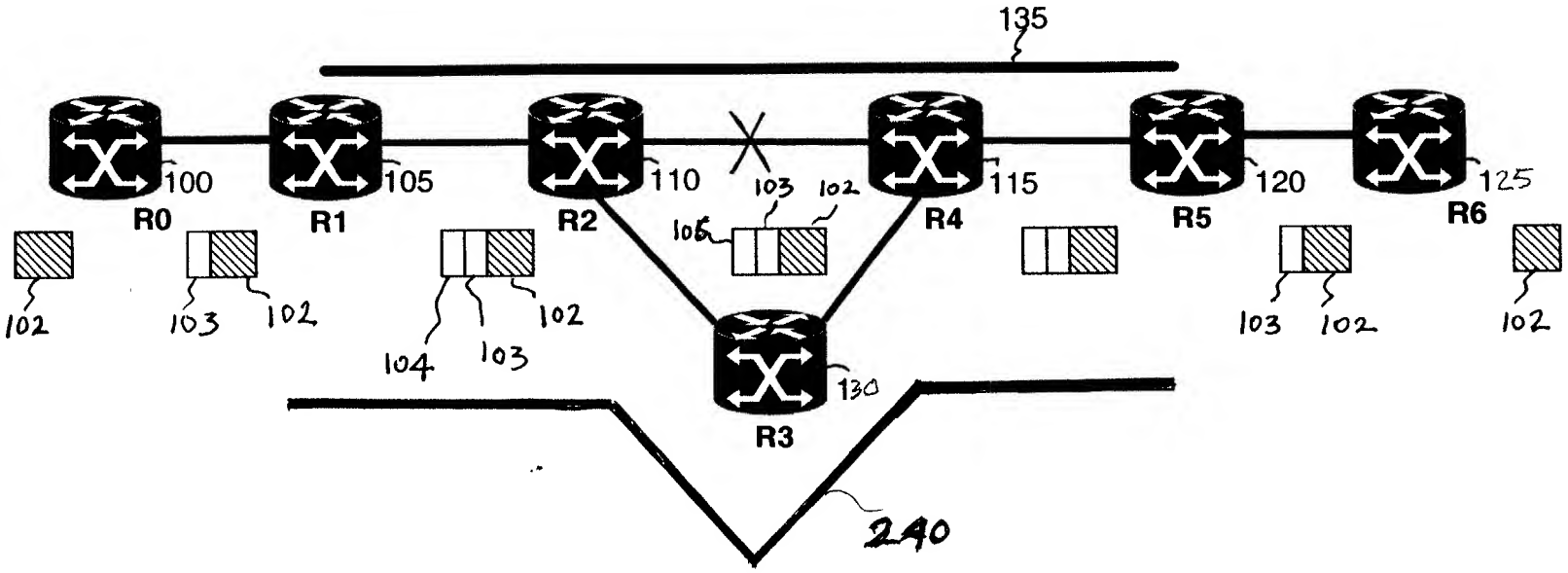

FIG. 2B
(PRIOR ART)

305 ATM id	310 VC Label	315 Tunnel Label	320 Interface
10/100	100	20 -> 40	1 -> 3
20/200	200	20 -> 40	1 -> 3
30/300	300	30	2
40/400	400	20 -> 40	1 -> 3

FIG. 3

(PRIOR ART)

TO2660 "1127960

405 410 415

ATM id	VC Label	Group id
10/100	100	1
20/200	200	1
30/300	300	2
40/400	400	1

FIG. 4

TO2260 "nZTZ9660

520 Group id	525 Tunnel Label	530 Interface
1	20 -> 40	1 -> 3
2	30	3
3	40	2
4	50	5

FIG. 5

TO2260 "WO2129660

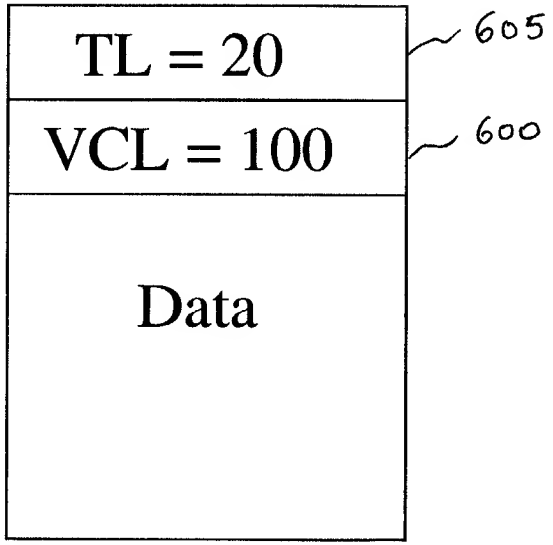

FIG. 6A

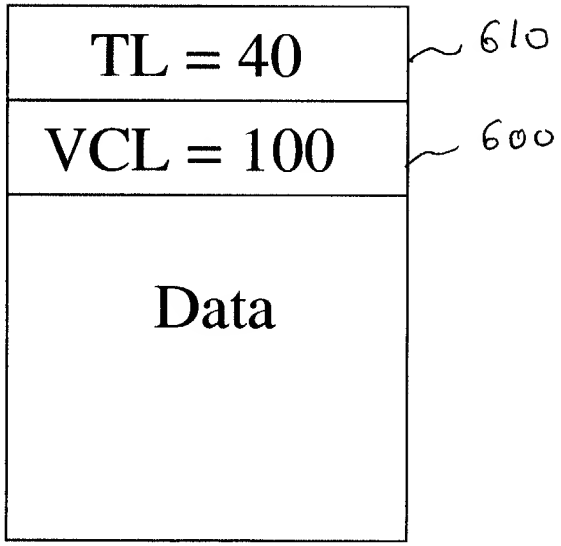

FIG. 6B

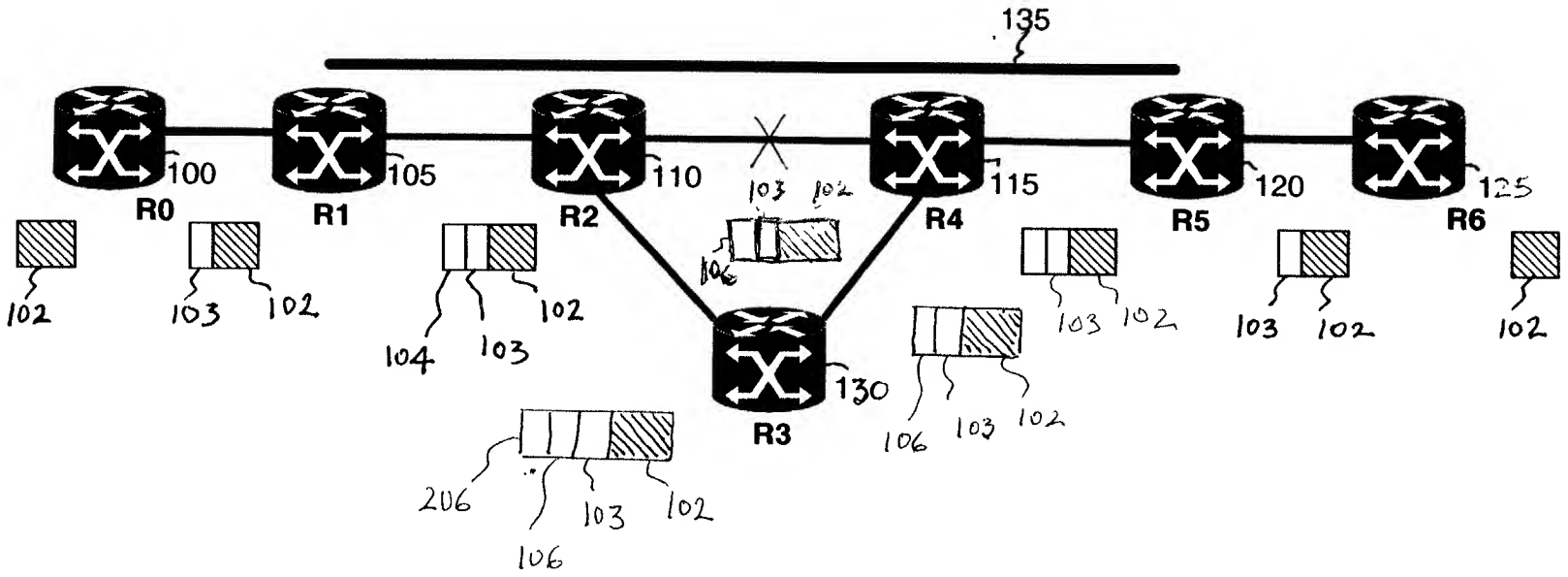
135
100
R0
105
R1
110
R2
103
102
115
R4
120
R5
125
R6
130
R3
102
103
102
104
103
102
103
102
103
102
103
102
206
103
102
106
106
103
102

FIG. 7

520 Group id	525 Tunnel Label	530 Original Interface	835 Backup Label Enable	840 Backup Label	845 New Interface
1	20->40	1 -> 3	NO	1	2
2	30	3	NO	1	3
3	40	2	NO	2	4
4	50	5	NO	1	4

FIG. 8

520 Group id	525 Tunnel Label	530 Original Interface	835 Backup Label Enable	840 Backup Label	845 New Interface
1	20	1	YES	50	2
2	30	3	NO	60	3
3	40	2	NO	70	4
4	50	5	NO	80	4

FIG. 9

TO2260 "h2T29660

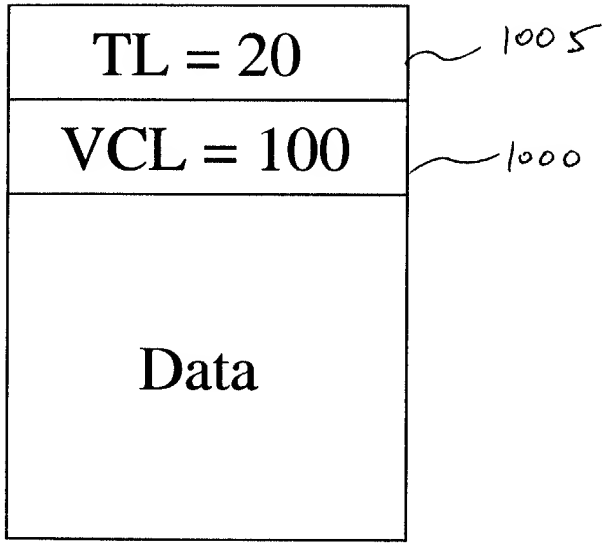

FIG. 10A

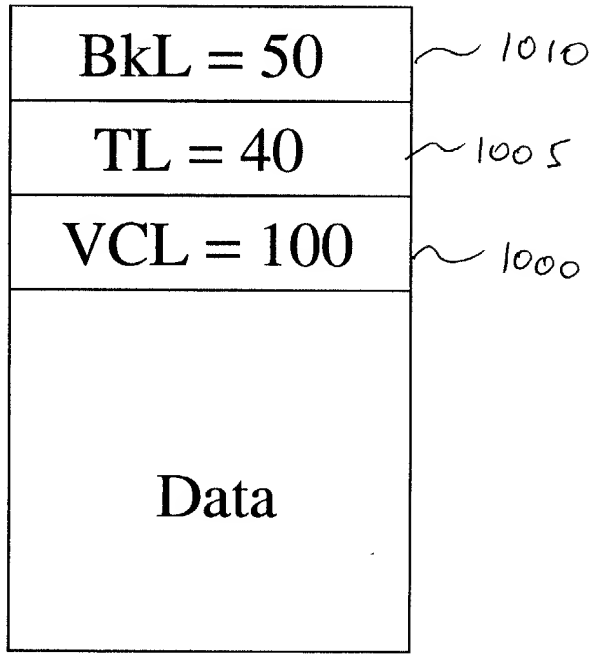

FIG. 10B

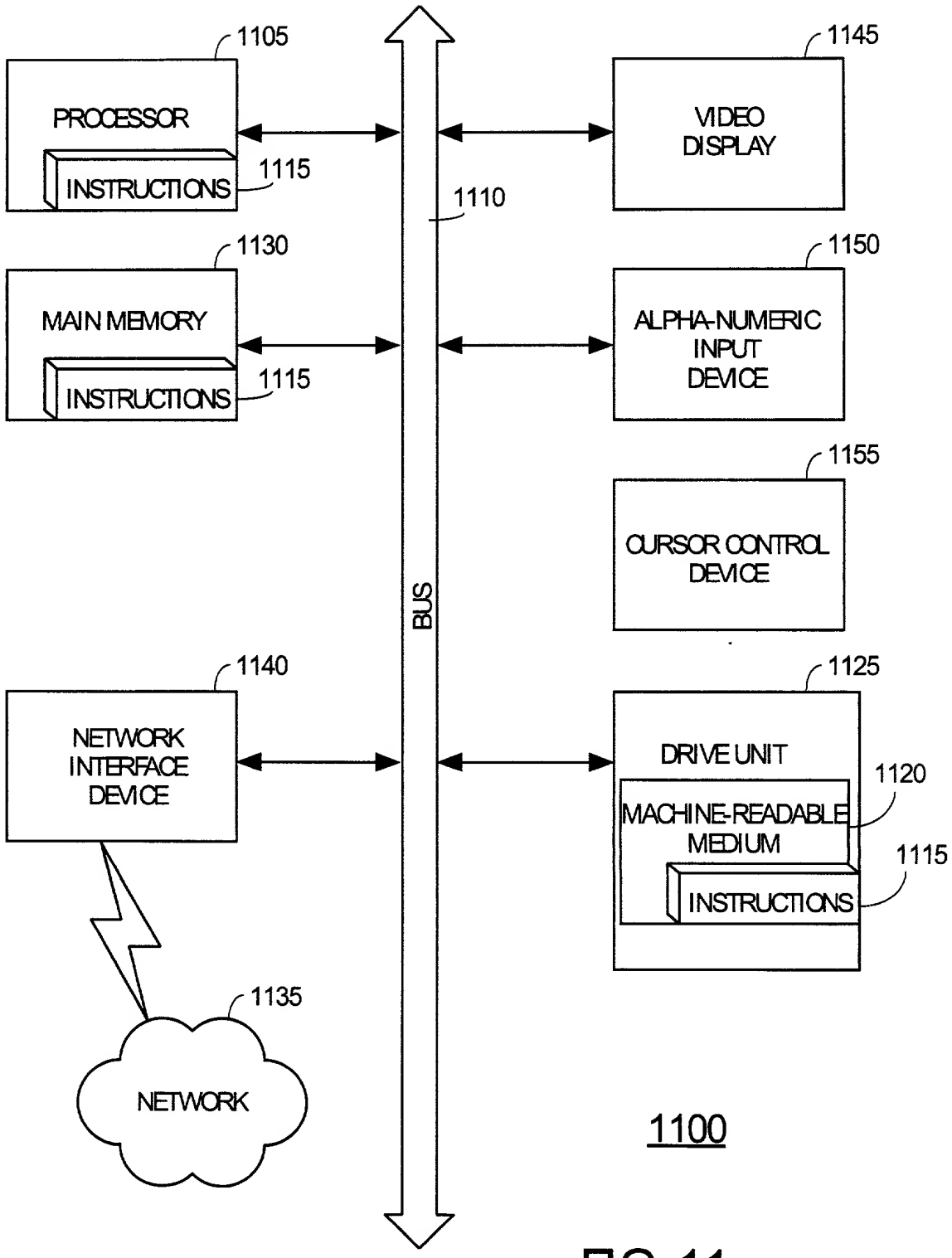
1105
PROCESSOR
INSTRUCTIONS
1115
1130
MAIN MEMORY
INSTRUCTIONS
1115
1140
NETWORK INTERFACE DEVICE
1135
NETWORK
BUS
1110
1145
VIDEO DISPLAY
1150
ALPHA-NUMERIC INPUT DEVICE
1155
CURSOR CONTROL DEVICE
1125
DRIVE UNIT
1120
MACHINE-READABLE MEDIUM
1115
INSTRUCTIONS
1100

FIG. 11